

## **REMARKS**

By this Amendment, Applicants have amended claim 18. No new matter has been added. Claims 1-26 and 41-61 are pending on the merits.

As an initial matter, Applicants appreciate the Examiner's indication that claims 41, 42, and 59 are allowed. Further, Applicants would like to thank Examiner Lee for the courtesy and consideration extended to Applicants' representative during the personal interview conducted on November 16, 2005. During the interview, the following issues were discussed.

### **I. Objection to Claims 18 and 52**

In the Office Action, claims 18 and 52 were objected to because of an informality. By this Amendment, Applicants have amended claim 18, and Applicants respectfully request reconsideration and withdrawal of the objection to claims 18 and 52.

### **II. Section 103(a) Claim Rejection Based on Granek et al. in Combination with Powell et al.**

In the Office Action, claims 1-8, 18-23, 43-49, 52-55, 60, and 61 were rejected under 35 U.S.C. § 103(a) based on Granek et al. (U.S. Patent No. 4,058,167) in combination with Powell et al. (WO 93/12839). Claims 1, 18, 43, 52, and 60 are the only independent claims rejected under § 103(a) based on the Office Action's proposed, hypothetical combination of the Granek et al. and Powell et al. references. Applicants respectfully traverse that rejection because the Office Action has failed to establish a *prima facie* case of obviousness at least because (1) the proposed combination does not disclose or suggest all of the subject matter recited in each of those independent

claims; and (2) there is no suggestion or motivation to make the rejection statement's proposed, hypothetical modification to the Granek et al. reference's disclosure based on the Powell et al. reference's disclosure.

A. Independent Claim 1

Applicants' independent claim 1 recites "[a] system for detecting and suppressing a fire condition in a storage unit for storing freight in a storage area containing a plurality of storage units, the system comprising: . . . a plurality of fire suppression devices . . . being configured to discharge a fire suppressant material into its associated storage unit upon detection of the fire condition in its associated storage unit . . . ." The Granek et al. and Powell et al. references, regardless of whether they are viewed individually or in combination, fail to disclose or suggest at least that subject matter recited in Applicants' independent claim 1.

In order to establish that a claim is *prima facie* obvious, a reference, or combination of references, must disclose or suggest all of the subject matter recited in the claim. M.P.E.P. § 2143. Since the Office Action's proposed, hypothetical combination of the Granek et al. and Powell et al. references does not disclose or suggest all of the subject matter recited in Applicants' independent claim 1, independent claim 1 is not *prima facie* obvious based on any combination of those references.

In the Office Action, the rejection statement interprets the Granek et al. reference as disclosing, among other things,

a system for detecting and suppressing a fire condition in a storage unit (compartment or room in Fig. 1 capable of storage) for storing objects in a storage area containing a plurality of storage units (facility/complex as a whole shown

in Fig. 1), the system comprising: a transmitter (16 and col. 4, lines 30-36) associated with each of at least some of the plurality of storage units . . . ; at least one receiver (48 and col. 4, lines 37-40) configured to detect a first signal and configured to provide a second signal . . . ; and a plurality of fire suppression devices (14) . . . , wherein detection of the fire condition in any one of the plurality of storage units does not necessarily result in discharging of fire suppressant material into others of the plurality of storage units (col. 4, lines 50-52 and col. 5, lines 4-19) . . . .

Office Action at 2-3. The rejection statement concedes that Granek et al. does not disclose “that the stored objects are freight.” Id. at 3. The rejection statement concludes, however, that “it would have been obvious . . . to apply the storage-units fire detection/extinguishing system of Granek et al. to a cargo storage area for storing freight such as taught by Powell et al. as a known intended use.” Id.

Applicants respectfully disagree with the rejection statement’s interpretation of Granek et al. and its obviousness conclusion. The Granek et al. reference does not disclose, among other subject matter, “[a] system for detecting and suppressing a fire condition in a storage unit for storing freight in a storage area containing a plurality of storage units, the system comprising: . . . a plurality of fire suppression devices . . . being configured to discharge a fire suppressant material into its associated storage unit upon detection of the fire condition in its associated storage unit . . . .”

Rather, Granek et al. discloses a fire protection apparatus for “small or medium-sized premises such as residential apartments and office premises.” (Col. 1, lines 6 and 12-14.) The apparatus comprises two lengths of multi-compartmental conduit 11 and 12, which extend from a common water-supply manifold 13 horizontally through the rooms of the apartment. (Col. 2, lines 33-37.) Nozzles 14 are connected at intervals along the conduit, and each of the nozzles 14 is directed into the interior of a

different respective area or room of the apartment. (Col. 2, lines 37-40.) Associated with each nozzle 14, there is a fire hazard detector 16, which is arranged centrally in the room or area toward which the nozzle 14 is directed. (Col. 2, lines 41-43.) The manifold 13 includes manifold outlets 42, and each of the manifold outlets 42 is equipped with an on-off valve 47. (Col. 4, lines 5-6, 17-18.) The valves 47 are electrically operated and can be conventional solenoid-operated valves. (Col. 4, lines 17-20.) Each of the valves 47 is operatively linked through a control system to a respective fire hazard detector 16, so that when a detector 16 is activated through detection of flame, heat, smoke, or other combustion product, the particular solenoid valve 47 operatively linked thereto is opened to allow flow of water selectively to the respective nozzle 14 associated with the detector 16, which has been activated. (Col. 4, lines 20-29.) In other words, rather than disclosing or suggesting fire suppression devices associated with “a storage unit for storing freight in a storage area containing a plurality of storage units,” as recited in Applicants’ independent claim 1, Granek et al. discloses subject matter that concerns individual rooms in an apartment building.

During the interview with the Examiner conducted on November 16, 2005, the Examiner indicated that he is interpreting that recitation “broadly,” and that he believes the individual rooms of the apartment building are “storage units” and that the apartment building is a “storage area containing a plurality of storage units.” Applicants respectfully submit that such a “broad[]” interpretation is improper, particularly in light of how “storage unit” and “storage area” are used in the present application’s specification. See, e.g., p. 2, lines 9-12; p. 3, lines 8-9; p. 4, lines 4-5; p. 9, lines 13-15, 19-22; p. 10,

lines 1-3 (describing examples of “storage units” and “storage areas”). Simply stated, Granek et al.’s rooms in an apartment building are not “storage unit[s] for storing freight in a storage area containing a plurality of storage units,” as recited in Applicants’ independent claim 1.

In addition to the rejection statement’s proposed, hypothetical combination failing to disclose or suggest all of the subject matter recited in Applicants’ independent claim 1, there is no legally sufficient suggestion or motivation to make the proposed combination. Under the guidance of the M.P.E.P., in order “[t]o establish a *prima facie* case of obviousness, . . . there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” § 2143. Furthermore, “[t]he teaching or suggestion to make the claimed combination . . . must . . . be found in the prior art, not in applicant’s disclosure.” Id. The M.P.E.P. further advises that “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” Id.

As a result, even if, for the sake of argument, Granek et al. could be interpreted in the rejection statement’s improper manner, there is no reason someone in Granek et al.’s art relating to fire protection in buildings would look to Powell et al.’s system for extinguishing and controlling fires in an aircraft cargo area for solving a fictitious problem invented by the rejection statement, particularly since neither Granek et al. nor Powell et al. provides any suggestion or motivation in support of the rejection statement’s unsupported conclusion that “it would have been obvious . . . to apply the

storage-units fire detection/extinguishing system of Granek et al. to a cargo storage area for storing freight such as taught by Powell et al. as a known intended use.” Office Action at 3.

Furthermore, even if, for the sake of argument, there was some legally sufficient suggestion or motivation to combine the Granek et al. and Powell et al. disclosures in the rejection statement’s proposed, hypothetical manner, combining the disclosures of Granek et al. and Powell et al. might merely result in a fire protection apparatus like Granek et al.’s being incorporated into an aircraft, such that various locations within the aircraft could be independently treated with fire suppressant. Applicants respectfully submit that such a result would still render the present application’s claims patentably distinguishable from the rejection statement’s combination of Granek et al. and Powell et al. at least because that combination would still not render *prima facie* obvious “[a] system for detecting and suppressing a fire condition in a storage unit for storing freight in a storage area containing a plurality of storage units, the system comprising: . . . a plurality of fire suppression devices . . . being configured to discharge a fire suppressant material into its associated storage unit upon detection of the fire condition in its associated storage unit . . . .”

For at least the above-outlined reasons, the Office Action has filed to establish that Applicants’ independent claim 1 is *prima facie* obvious based on the rejection statement’s proposed, hypothetical combination of Granek et al. and Powell et al. Therefore, Applicants’ independent claim 1 is patentably distinguishable from Granek et al. and Powell et al., regardless of whether those references are viewed individually or in combination.

B. Amended Independent Claim 18

Applicants' amended independent claim 18 recites a fire suppression system for use in an aircraft, the system including, among other recitations, "a plurality of storage units being located at predetermined positions in [a] storage area, the storage units comprising at least one of a container and a pallet; . . . and a fire suppression device configured to discharge a fire suppressant material into the storage unit upon detection of [a] fire condition." For at least reasons similar to those outlined above with respect to independent claim 1, the Granek et al. and Powell et al. references do not disclose or suggest at least that subject matter recited in amended independent claim 18.

Furthermore, Applicants' amended independent claim 18 recites a fire suppression system, including, among other recitations, "a transmitter associated with each storage unit and configured to transmit a first signal upon detection of a fire condition, the first signal being an infrared signal . . . ." Neither Granek et al. nor Powell et al. discloses or suggests at least that subject matter recited in amended independent claim 18.

The rejection statement concedes that Granek et al. and Powell et al. do not disclose that the alleged "first signal is infrared." Office Action at 6. The rejection statement nevertheless concludes that "[w]hile Granek teaches using ultrasonic or radio frequency signals, it would have been obvious . . . that other wireless links, including an infrared link, can be used in a system such as taught by Granek et al. and Powell et al. without unexpected results, whereby infrared can specifically be chosen if radio or ultrasonic interference may be a potential problem in the application environment." Id.

As outlined previously herein, in order to establish a *prima facie* case of obviousness, there must be some suggestion or motivation to modify a reference. M.P.E.P. § 2142. Furthermore, such a suggestion or motivation must be found either in the references themselves or in the knowledge generally available to a person having ordinary skill in the art rather than in an applicant's own disclosure. Id. (emphasis added).

Applicants respectfully submit that the Office Action has not identified any prior art reference that supports its obviousness conclusion about infrared links. As a result, the Office Action must be relying on either Applicants' own disclosure or on an apparent assertion that such knowledge is generally available to a person having ordinary skill in the art. During the interview with the Examiner, the Examiner asserted that the rejection statement's unsupported conclusion is so well known that the Examiner didn't supply any evidence to support his allegation in the Office Action.

If the Examiner insists on maintaining the claim rejection under 35 U.S.C. §103(a) based on the unsupported assertions relating to the Granek et al. reference's failure to disclose sending wireless signals via infrared transmission, Applicants respectfully request that the Examiner supply either a prior art reference or a personal affidavit supporting those assertions, so that Applicants will be provided with a fair opportunity to respond appropriately. See M.P.E.P. § 2144.03 (citing 37 C.F.R. § 1.104(d)(2), which requires an Examiner to supply a personal affidavit including specific facts supporting an Examiner's assertion of personal knowledge). Applicants make such a request since it appears that the Examiner is either relying on the Examiner's own personal knowledge or on improper hindsight and the teaching of

Applicants' own disclosure to supply the alleged suggestion or motivation for making the selective and hypothetical modifications to the Granek et al. disclosure to arrive at Applicants' system, as recited in amended independent claim 18. In the absence of such an affidavit or some other legally-valid supporting evidence, the Office Action has failed to establish that amended independent claim 18 is *prima facie* obvious based on the Granek et al. and/or Powell et al. references.

For at least the above-outlined reasons, the Office Action has failed to establish that Applicants' amended independent claim 18 is *prima facie* obvious based on the rejection statement's proposed, hypothetical combination of Granek et al. and Powell et al. Therefore, Applicants' amended independent claim 18 is patentably distinguishable from Granek et al. and Powell et al., regardless of whether those references are viewed individually or in combination.

### C. Independent Claim 43

Applicants' independent claim 43 recites a system for detecting and suppressing a fire condition in a storage unit in a storage area, the system including, among other recitations, "a transmitter associated with the storage unit and configured to transmit a first signal upon detection of the fire condition, wherein the first signal is an infrared signal." For reasons at least similar to those outlined previously herein with respect to independent claim 1 and amended independent claim 18, the Granek et al. and Powell et al. references do not disclose or suggest at least that subject matter recited in independent claim 43.

D. Independent Claim 52

Applicants' independent claim 52 recites a fire suppression and indication system for use in an aircraft having a storage area, the system including, among other recitations, "a plurality of storage units for storing freight, the storage units being located at predetermined positions in the storage area; [and] a transmitter associated with each storage unit and configured to transmit a first signal upon detection of a fire condition, wherein the first signal is an infrared signal . . . ." For reasons at least similar to those outlined previously herein with respect to independent claim 1 and amended independent claim 18, the Granek et al. and Powell et al. references do not disclose or suggest at least that subject matter recited in independent claim 52.

E. Independent Claim 60

Applicants' independent claim 60 recites a system for detecting and suppressing a fire condition in a storage unit for storing freight in a storage area containing a plurality of storage units, the system including, among other recitations, "a plurality of fire suppression devices, wherein at least two of the fire suppression devices are associated with different storage units, and wherein the fire suppression devices are configured to discharge a fire suppressant material only into a storage unit experiencing the fire condition." For reasons at least similar to those outlined previously herein with respect to independent claim 1, the Granek et al. and Powell et al. references do not disclose or suggest at least that subject matter recited in independent claim 60.

### **III. Rejections of Dependent Claims under Section 103(a)**

In the Office Action, claims 9-17, 24-26, 50, 51, and 56-58 were rejected under 35 U.S.C. § 103(a) based on Granek et al. in combination with Powell et al. and one or more of the following references: Eguchi (U.S. Patent No. 3,909,814), Fierbaugh (U.S. Patent No. 4,987,958), Sears (U.S. Patent No. 6,032,745), and Wootton (U.S. Patent No. 3,848,231). The Eguchi, Fierbaugh, Sears, and Wootton references, viewed individually or in combination, fail to overcome the deficiencies of the Granek et al. and Powell et al. references outlined previously herein. Furthermore, since each of dependent claims 9-17, 24-26, 50, 51, and 56-58 depends from one of independent claims 1, 18, 43, and 52, they should be allowable for at least the same reasons their corresponding independent claims should be allowable.

### **IV. Conclusion**

For at least the reasons set forth above, independent claims 1, 18, 43, 52, and 60 should be allowable. Dependent claims 2-17, 19-26, 44-51, 53-58, and 61 depend from one of independent claims 1, 18, 43, 52, and 60. Consequently, those dependent claims should be allowable for at least the same reasons their corresponding independent claims are allowable.

Therefore, Applicants respectfully request reconsideration of this application, withdrawal of the outstanding claim rejections, and allowance of claims 1-26 and 41-61.

If the Examiner believes that a telephone conversation might advance prosecution, the Examiner is cordially invited to call Applicants' undersigned attorney at (571) 203-2739.

Applicants respectfully submit that the Office Action contains numerous assertions concerning the related art and the claims. Regardless of whether those assertions are addressed specifically herein, Applicants respectfully decline to automatically subscribe to them.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 6-0916.

Respectfully submitted,

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